#### PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

#### SAFETY AND ENFORCEMENT DIVISION

RESOLUTION ESRB-6 August 18, 2016

## **RESOLUTION**

Resolution ESRB-6. CCFC Sutter Energy, LLC (CCFC) proposes to suspend operation of its Sutter Energy Center (Sutter) and place it in a cold layup status.

#### PROPOSED OUTCOME:

• Authorize CCFC to place Sutter in cold layup.

#### SAFETY CONSIDERATIONS:

• CCFC will provide 24-hour staffing seven days a week during layup activities to secure the site. During cold layup, CCFC will provide a 5-person team for security and maintenance necessary for a safe and reliable restart.

## **ESTIMATED PUBLIC COST:**

• None

### **SUMMARY**

This Resolution authorizes CCFC to suspend operation of Sutter and place it in cold layup for at least the remainder of 2016.

CCFC is a wholly-owned subsidiary of Calpine Corporation (Calpine) and is a Generating Asset Owner (GAO) that is subject to the California Public Utilities Commission's (Commission's) General Order (GO) 167, which includes Operation, Maintenance, and Logbook Standards.

Operation Standard (OS) 23 requires GAO to notify the Commission and the California Independent System Operator (CAISO) at least 90 days in advance before changing the long-term status of a power plant. OS 26 requires GAO to prepare and submit to the Commission a long-term storage plan if it plans to place a plant in long-term storage. OS 21 requires GAO to provide a prudent level of plant security at all times. And OS 24 requires GAO to seek the Commission's and CAISO's affirmation before changing the long-term status of a power plant.

This Resolution affirms that CCFC has complied with the applicable standards and authorizes it to suspend operation of Sutter and place it in cold layup for at least 2016.

#### **BACKGROUND**

Sutter is a combined-cycle power plant located in Yuba City, Sutter County. The 525 net megawatts capacity plant consists of two gas-fired combustion turbine units and one steam turbine unit. Calpine owns and operates the plant through its subsidiary CCFC Sutter Energy, LLC. The plant began commercial operation in July 2001.

Sutter was originally connected to the Western Area Power Administration (WAPA) transmission system that was under CAISO's operational control. In January 2005, WAPA withdrew from CAISO's control and crippled Sutter's ability to dispatch into the market. In December 2005, the Federal Energy Regulatory Commission approved Sutter's pseudo-tie agreement with CAISO and allowed it to reenter the market as a system resource.

Sutter is subject to a WAPA transmission charge that other system resources may not incur. This situation has created market challenges for Sutter. Sutter tried to procure Resource Adequacy (RA) contracts. While it successfully secured a number of contracts between 2005 and 2011<sup>1</sup>, those contracts failed to provide the revenue needed to support Sutter's long-term viability. As a result, in November 2011, Calpine notified the Commission that it would retire Sutter in 2012.

In response, the Commission ordered the Investor-Owned Utilities (IOUs), in Resolution E-4471, to negotiate a short term contract with Calpine.<sup>2</sup> The Commission has authority to authorize IOUs to procure energy under Public Utilities Code Sections 454.5 and 701. Sutter, ultimately, negotiated a limited term RA capacity contract with the IOUs.<sup>3 4 5</sup> Those contracts ended on December 31, 2012.

Currently, Sutter does not have a contract and sells power to CAISO by virtue of the pseudo-tie agreement. Calpine is not seeking a Capacity Procurement Mechanism (CPM) designation from CAISO as CAISO has determined that Sutter will not be needed for grid reliability through at least 2016. Calpine also anticipates that Sutter will not be needed in 2017. Therefore, Calpine proposes to suspend operation of Sutter and place it in cold layup.

### **NOTICE**

This Resolution is not in response to an Advice Letter. Notice was made by publication of the Draft Resolution on the Commission's Daily Calendar.

<sup>&</sup>lt;sup>1</sup> The Commission's Long-term Procurement Process provides a mean for independent power producers to sell power to the utilities in the form of a "Resource Adequacy" contract.

<sup>&</sup>lt;sup>2</sup> Resolution E-4471 Ordering Paragraph 1 (at Pg. 13) adopted on March 22, 2012

<sup>&</sup>lt;sup>3</sup> Commission's Approval of PG&E Advice Letter 4034-E and 4034-E-A dated May 25, 2012

<sup>&</sup>lt;sup>4</sup> Commission's Approval of SDG&E Advice Letter 2354-E dated May 25, 2012

<sup>&</sup>lt;sup>5</sup> Commission's Approval of SCE Advice Letter 2730-E dated May 25, 2012

<sup>&</sup>lt;sup>6</sup> CAISO's letter regarding Sutter Generating Facility dated January 21, 2016

### **PROTESTS**

Because there was no Advice Letter, no protests were filed.

### **DISCUSSION**

#### CCFC proposes to suspend operation of Sutter and place it in cold layup for at least 2016.

By this Resolution, the Commission authorizes CCFC to suspend operation of Sutter and place it in cold layup for at least the remainder of 2016. CCFC is a wholly-owned subsidiary of Calpine and is a GAO as defined in GO 167. This Resolution affirms that CCFC has complied with OS 21, 23, 24, and 26.

OS 23<sup>7</sup> requires GAO to notify the Commission and CAISO at least 90 days in advance before changing the long-term status of a power plant. On January 14, 2016, Calpine notified the Commission in writing of its intent to layup Sutter. On February 17, 2016, Calpine formally notified the Commission of the status change, and included a CAISO confirmation letter and a layup plan. CAISO has confirmed that Sutter is not needed for grid reliability in 2016. Calpine's notifications satisfied both OS 23 and 24<sup>11</sup>, which requires GAO to seek the Commission's and CAISO's affirmation before changing the long-term status of a power plant.

OS 26<sup>12</sup> requires GAO to prepare and submit to the Commission a long-term storage plan if it plans to place a plant in long-term storage. On February 17, 2016, Calpine submitted a Cold Layup Plan (Plan) for Sutter. The Plan details the measures that Calpine will take to place Sutter in a cold layup status, which would require maintaining certain equipment in operational states in order to allow for an eventual restart. The Plan is prepared in accordance with applicable OS 26 guidelines, best industry practices, and equipment manufacturer recommendations. The Plan,

<sup>&</sup>lt;sup>7</sup> Operation Standard 23 states, "The GAO notifies the Commission and the Control Area Operator in writing at least 90 days prior to a change in the long-term status of a unit. The notification includes a description of the planned change."

<sup>&</sup>lt;sup>8</sup> Calpine's letter regarding Layup of the Sutter Energy Center – Next Steps dated January 14, 2016

Calpine's letter regarding Notice of Change in Long-Term Status of Sutter Energy Center dated February 17, 2016
 CAISO's letter regarding Sutter Generating Facility dated January 21, 2016

<sup>&</sup>lt;sup>11</sup> Operation Standard 24 states, "The GAO maintains a unit in readiness for service in conformance with Standard 22 unless the Commission, after consultation with the Control Area Operator, affirmatively declares that a generation facility is unneeded during a specified period of time. This standard is applicable only to the extent that the regulatory body with relevant ratemaking authority has instituted a mechanism to compensate the GAO for readiness services provided."

Operation Standard 26 states, "At least 90 days before a change in the long-term status of an electric generation unit, other than permanent shutdown and/or decommissioning, the GAO shall submit to the Commission plans and procedures for storage, reliable restart, and operation of the unit."
Long-term or cold storage refers to the removal of a generation unit from service for an extended period of time.

This involves a process called a "layup" to prevent corrosion in the boiler while in storage. In a dry layup, the boiler is drained of water and dried for storage. In a wet layup, the boiler is filled with a mixture of water and chemical to prevent corrosion. Sutter will utilize a dry layup process for its boiler (HRSG) and associated systems.

however, does not include operational procedures for restart as required in OS 26. Should Calpine decide that market conditions become favorable to restore Sutter to full operation or if CAISO determines Sutter is needed for grid reliability; the Commission requires that Calpine submit a plan to ensure a safe and orderly restart.

OS 21<sup>14</sup> requires GAO to provide a prudent level of plant security at all times. Sutter's Plan discusses site security and staffing during layup activities and in cold layup. Calpine will provide 24-hour staffing seven days a week during layup activities to secure the site. During cold layup, Calpine will provide a 5-person team for security and necessary maintenance.

During cold layup, Calpine will also continue to maintain Sutter in compliance with all applicable laws, ordinances, regulations, and standards. This includes keeping current with all applicable environment permits and obligations needed to ensure a prompt and eventual restart.

Sutter had an average Net Capacity Factor of 24% and an Equivalent Availability Factor of 88% between 2011 and 2015. Commercialized in July 2001, Sutter utilizes high efficiency combined-cycle technology allowing it to generate low-cost power compared to conventional boiler plants. The plant uses clean-burning natural gas combustion turbines coupled with a Selective Catalytic Reduction system that further removes greenhouse gas emissions. Sutter also utilizes an air-cooled condenser that minimizes water use.

Given its highly efficient, clean, and flexible technology, Sutter, a moderately new plant, may play a crucial role in meeting California's energy needs as the state integrates more renewable resources. CAISO indicated that Sutter may be needed in the long term to provide flexible capacity for renewable integration.<sup>16</sup> Calpine's proposal to layup Sutter in lieu of a permanent shutdown will allow Calpine to further assess Sutter's future as market conditions change.

Calpine anticipates that CAISO will determine by the end of 2016 whether Sutter will be needed for grid reliability in 2017, at which time Calpine will notify the Commission of the assessment. If Sutter is deemed unneeded in 2017, Calpine intends to maintain Sutter in cold layup until such time it provides the Commission further information concerning Sutter's long-term future.

# **COMMENTS**

Public Utilities Code section 311(g)(1) requires draft resolutions to be served on all parties and subject to at least 30 days public review and comment prior to a vote by the Commission.

<sup>&</sup>lt;sup>14</sup> Operation Standard 21 states, "To ensure safe and continued operations, each GAO provides a prudent level of security for the plant, its personnel, operating information and communications, stepping up security measures when necessary."

<sup>&</sup>lt;sup>15</sup> Calpine's letter regarding Cold Layup Plan for the Sutter Energy Center Follow-up Questions dated March 10, 2016

<sup>&</sup>lt;sup>16</sup> CAISO's letter regarding Sutter Generating Facility dated January 21, 2016

Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for this draft resolution was neither waived nor reduced. Accordingly, notice was made by publication of this Draft Resolution on the Commission's Daily Calendar, and was mailed to all parties for comments on June 14, 2016.

Calpine and CCFC submitted comments on the Draft Resolution on June 29, 2016, but withdrew the comments on July 7, 2016. No reply comments were filed. Although the comments were withdrawn, the Draft Resolution was revised to correct a non-substantive factual error that Calpine and CCFC had identified.

## **FINDINGS**

- 1. CCFC Sutter Energy, LLC is a GAO that is subject to the Commission's GO 167, which includes Operation, Maintenance, and Logbook Standards.
- 2. CCFC Sutter Energy, LLC is a wholly-owned subsidiary of Calpine Corporation.
- 3. OS 23 requires GAO to notify the Commission and CAISO at least 90 days in advance before changing the long-term status of a power plant.
- 4. OS 24 requires GAO to seek the Commission's and CAISO's affirmation before changing the long-term status of a power plant.
- 5. OS 26 requires GAO to prepare and submit to the Commission a long-term storage plan if it plans to place a plant in long-term storage.
- 6. OS 21 requires GAO to provide a prudent level of plant security at all times.
- 7. On January 14, 2016, Calpine notified the Commission in writing of its intent to layup Sutter. On February 17, 2016, Calpine formally notified the Commission of the status change, and included a CAISO confirmation letter and a layup plan.
- 8. CAISO has confirmed that Sutter is not needed for grid reliability in 2016.
- 9. On February 17, 2016, Calpine submitted a Cold Layup Plan for Sutter. The Plan discusses site security. The Plan does not include operational procedures for restart as required in OS 26.
- 10. Sutter is a moderately new plant that utilizes highly efficient, clean, and flexible technologies. Sutter may play a crucial role in meeting California's energy needs as the state integrates more renewable resources.
- 11. CAISO indicated that Sutter may be needed in the long term to provide flexible capacity for renewable integration.

- 12. Calpine's proposal to layup Sutter in lieu of a permanent shutdown will allow Calpine to further assess Sutter's future as market conditions change.
- 13. The Commission authorizes Calpine to place Sutter in cold layup for at least the remainder of 2016.

#### THEREFORE IT IS ORDERED THAT:

- 1. CCFC Sutter Energy, LLC (a wholly-owned subsidiary of Calpine) is authorized to place Sutter in cold layup, effective August 18, 2016.
- 2. Calpine shall provide a prudent level of security during layup activities and in cold layup.
- 3. Calpine shall continue to maintain Sutter in compliance with all applicable laws, ordinances, regulations, and standards, which includes keeping current with all applicable environment permits and obligations needed to ensure a prompt and eventual restart.
- 4. Calpine shall notify the Commission if CAISO determines that Sutter is needed for grid reliability in 2017. If Sutter is unneeded, Calpine shall provide the Commission further information concerning Sutter's long-term future.
- 5. Calpine shall submit a plan for safe and reliable restart should Calpine decide that market conditions become favorable to restore Sutter to full operation or if CAISO determines Sutter is needed for grid reliability.
- 6. This Resolution does not result in any cost or ratemaking issues associated with Resource Adequacy procurement.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on August 18, 2016, the following Commissioners voting favorably thereon: